

Work Order ID 78445

\*78445\*

January-10-12 8:50:13 AM

Page 1

Item ID: D3990-1 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Cable Guard  
 Start Date: 10/01/2012 Start Qty: 1.00 \*1\* Cust Item ID:  
 Required Date: 20/01/2012 Req'd Qty: 1.00 \*1\* Customer:  
 Reference:

Approvals: Process Plan: MLJ Date: 12/01/10 Tooling: Date: Run Start \*NR1\*  
 QC: Date: SPC (Y/N): Date: Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3990	A

100	0.00								
*100*									
Waterjet	Memo	0.00							
FLOW CNC Waterjet	Cut Blank as per File d3990-1-blank								

B12-1-10



110	0.00								
*110*									
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	Machine as per Folio FA845								
	Folio Rev: <u>AA</u>								
	Dwg Rev: <u>3</u>								
	Deburr as per Dwg								

SA

12/01/12



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



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# Picklist Print

January-10-12 8:50:17 AM

Page 1

Work Order ID: 78445

\*78445\*

Parent Item: D3990-1

\*D3990-1\*

Parent Item Name: Cable Guard

Start Date: 10/01/2012

Required Date: 20/01/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA: New issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB1750X1000 X4800		Purchased	No			100	sf	0.0000	1.75	1.842105			

\*MUHMWB1750X1000X4800\*

UHMW 1.75x1.00x48.00

\*\*

B 12-1-10

①

M120035

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

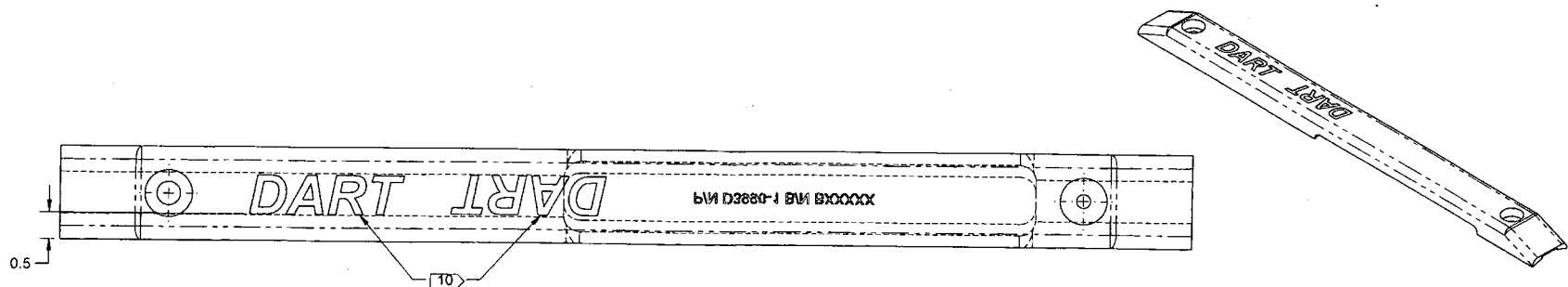
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

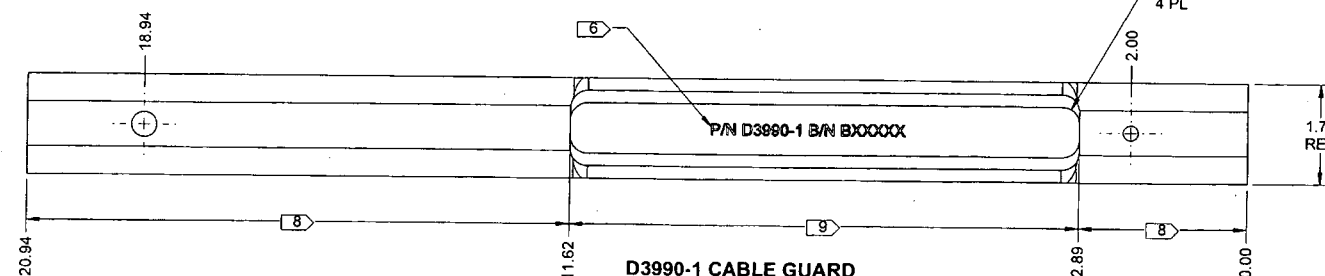
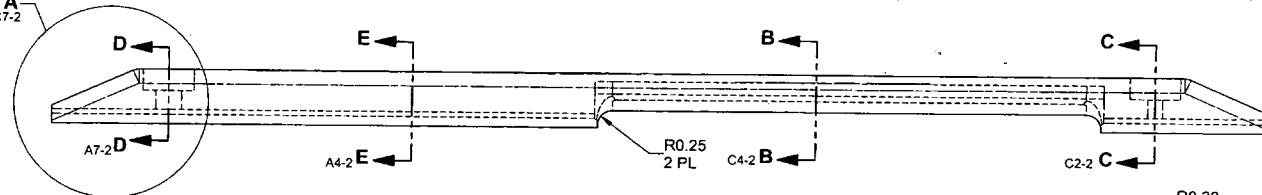
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**NOTE:** Date & initial all entries

8 7 6 5 4 3 2 1



DETAIL A  
C7-2



**D3990-1 CABLE GUARD**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE

WORK ORDER  
NO. 38445 M.C.J  
1210110

RELEASE  
2011-11-16

**NOTES:**

- 1) MATERIAL: MAKE FROM BLACK UHMW  
REF DART SPECIFICATION MUHMB10
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE WITH DART P/N "D3990-1" AND B/N TO MAX DEPTH OF 0.015 AND MIN TOOL TIP RAD 0.25
- 7) WEIGHT: 0.64 lbs
- 8) MACHINE CONSTANT SECTION E-E, EXCEPT FOR DETAIL A
- 9) MACHINE CONSTANT SECTION B-B, EXCEPT FOR TRANSITIONS
- 10) ENGRAVE "DART" LOGO ON UPPER SIDE TO MAX DEPTH OF 0.015 AND MIN TOOL TIP RAD 0.25, 2 PL

B	SEE SECTION E-E, ZONE B4-2 0.25 RAD ADDED.	AJS	11.11.10
A	NEW ISSUE	HS	09.08.28
REV.	DESCRIPTION	BY	DATE
DESIGN	HS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	HS	DRAWING NO.	REV. B
MFG. APPR.	HS	D3990	SHEET 1 OF 2
APPROVED	HS	TITLE	SCALE
DE APPR.	HS	CABLE GUARD	NTS
DATE	11.11.10	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES AND COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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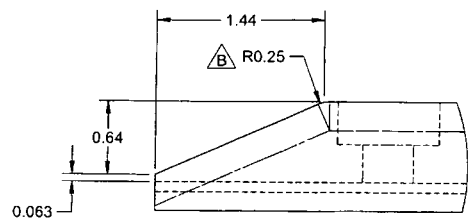
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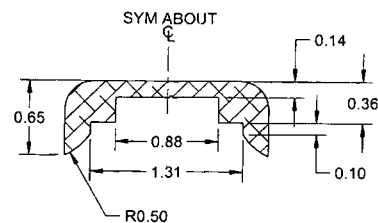
**NOTE:** Date & initial all entries



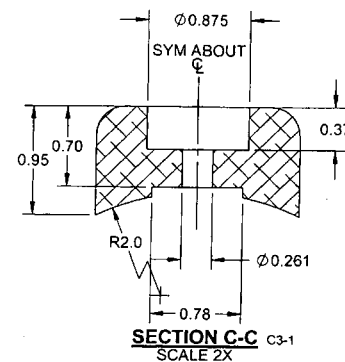
78445



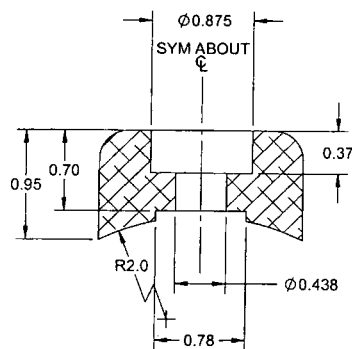
**DETAIL A** C8-1  
SCALE 2X  
(BOTH ENDS)



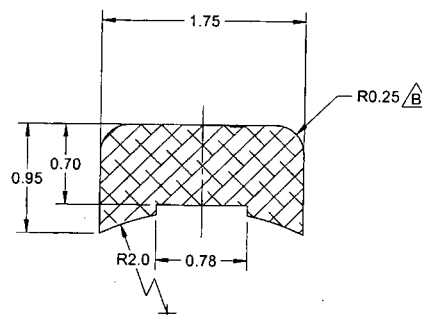
**SECTION B-B** C5-1  
SCALE 2X



**SECTION C-C** C3-1  
SCALE 2X



**SECTION D-D** C8-1  
SCALE 2X



**SECTION E-E** C6-1  
SCALE 2X

**RELEASED**  
2011-11-16

DESIGN	HS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D3990	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	CABLE GUARD	NTS
DATE	11.11.10	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

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<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 78445
<b>Description:</b> Cable Guard		<b>Part Number:</b> D3990-1
<b>Inspection Dwg:</b> D3990	<b>Rev:</b> A	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
20.94	+/-0.030	20.92	✓		Tape	BC 09
11.62	+/-0.030	11.62	✓		"	
2.89	+/-0.030	2.905	✓		Dial Caliper	BC 09
1.75 REF	+/-0.030	1.755	✓			
2.00	+/-0.030	2.010	✓			
18.94	+/-0.030	18.94	✓			
0.5	+/-0.100	.5	✓			
0.65	+/-0.030	.646	✓			
0.88	+/-0.030	.882	✓			
1.31	+/-0.030	1.310	✓			
0.14	+/-0.030	.148	✓			
0.36	+/-0.030	.367	✓			
0.10	+/-0.030	.110	✓			
Ø0.875	+/-0.010	.875	✓			
0.37	+/-0.030	.370	✓			
0.95	+/-0.030	.954	✓			
0.70	+/-0.030	.705	✓			
0.78	+/-0.030	.797	✓			
Ø0.261	+0.006/-0.001	.260	✓			
Ø0.875	+/-0.010	.874	✓			
0.37	+/-0.030	.370	✓			
0.70	+/-0.010	.700	✓			
0.95	+/-0.030	.954	✓			
0.78	+/-0.030	.797	✓			
Ø0.438	+0.006/-0.001	.437	✓			
1.75	+/-0.030	1.755	✓			
0.70	+/-0.030	.705	✓			
0.95	+/-0.030	.954	✓			
0.78	+/-0.030	.797	✓			
R2.0	+/-0.100	2.0	✓			

<b>Measured by:</b> [Signature]	<b>Audited by:</b> [Signature]	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 12/01/12	<b>Date:</b> 12/01/12	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	09.11.11	New Issue	KJ [Signature]	[Signature]

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